



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,399	01/14/2000	Michael L. Trompower	TELNP200US	8324

23623 7590 02/11/2004

AMIN & TUROCY, LLP
1900 EAST 9TH STREET, NATIONAL CITY CENTER
24TH FLOOR,
CLEVELAND, OH 44114

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
----------	--------------

2686

13

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/483,399

Applicant(s)

Micheal L Trompower

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 23, 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2686

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 7-8, 18-19, 21-28, 32-33, 35,** are rejected under 35 U.S.C. 102(e) as being anticipated by Paatelma (US Patent Number 6,463,042 B1).

Regarding **Claims 1, 19, 21, 35**, Paatelma inherently teaches a cellular communication unit/method (col 3 lines 60-67, col 4 lines 1-6), the unit comprising:

a transmitter (14) adapted to transmit data over an RF link (col 3 lines 60-67, col 4 lines 105); and

a power control module 18 coupled to the transmitter 14 (see figure 4), the power control module 18 adapted to receive a data packet having a first portion (header, col 5 lines 2-18) and a second portion (data portion) and transmit the first portion at a first transmission power and the second portion at a second transmission power, and wherein **at least the second comprises data** (col 2 lines 34-54).

Regarding **Claim 7**, Paatelma teaches wherein the communication unit is an access point (col 4 lines 51-57). Paatelma teaches that the mobile station 10 need not to be mobile at all, but could

Art Unit: 2686

be installed or used at a fixed station. The mobile can be capable of operating with one or more air interface standards, modulation types, and access types (see figure 4, col 4 lines 51-57).

Regarding **Claim 8**, Paatelma teach that the communication unit is a mobile unit (col 4 lines 8-15).

Regarding **Claim 18**, Paatelma inherently teaches a unit wherein the communication unit is coupled to a network (col 3 lines 60-66) and the network provides the power control circuit 18 (see figure 4, col 5 lines 2-18) with information relating to the power transmission level of the first portion and the second portion (col 2 lines 34-54).

Regarding **Claim 22**, Paatelma teaches a method wherein the first power and the second power are adjusted so that the first portion and the second portion have essentially the same range (col 2 lines 50-54).

Regarding **Claim 23**, Paatelma teaches a method wherein a communication unit precedes of transmitting a first portion a first transmission power level (col 2 lines 34-54), the communication unit including a transmitter 14, a power control module 18 coupled to the transmitter (14A, 14, modulator is part of transmitting module). Paatelma inherently teaches that, a processor coupled to the power control module 18 and a receiver 16 couple the processor (col 4 lines 20-30, lines 40-65). Paatelma teaches that the controller 18 may be comprises of a digital signal processor device and other support circuits, and the control and signal processor functions of the mobile station are allocated between these devices according to their capabilities (col 4 lines 20-29).

Art Unit: 2686

Regarding **Claim 24**, Paatelma teaches a method wherein the processor (col 4 lines 8-29) provides the power control module 18 (col 4 lines 8-15) with the first transmission power (header, transmitted higher) and the second transmission power (data, lower) after providing a communication unit and prior to transmitting a first portion of the data packet at a first transmission power level. The first portion is the header, which transmits with the first power level. (col 2 lines 50-54). Processor is part of the controller (col 3 lines 20-28), and Paatelma teaches that power detection and power controlling (col 2 lines 34-55)

Regarding **Claim 25**, Paatelma inherently teaches a method wherein the processor (controller 18 comprises processor, col 4 lines 20-28) evaluates the first transmission power and the second transmission power based on a desired transmission range for the first portion and the second portion of the data packet (col 2 lines 34-40). Paatelma teaches power control and power detections (col 2 lines 41-55), there, inherently teaches the power evaluation. Paatelma teaches a method for operating a wireless terminal in a wireless communication system that operates with frames time divided into slots each having a Header portion followed by a Data portion. The system is arranged to transmit a downlink slot so that the Header portion is transmitted at a higher power level than the Data portion when the Data portion does not contain valid data so as to reduce system interference. This is known as a Quasi-Discontinuous Transmission (Q-DTX) mode of operation. The method includes steps of (A) receiving all of the Header portion and only a part of the Data portion of a slot and detecting whether the Header portion was transmitted at a higher power level than the Data portion is being transmitted; and (B) if it is detected that the

Art Unit: 2686

Header portion was transmitted at a higher power level than the Data portion is being transmitted, terminating the reception of a remaining part of the slot and placing at least a portion of the wireless terminal in a reduced power consumption state. Otherwise, if it is detected that the Header portion was transmitted at the same power level as the Data portion is being transmitted, continuing to receive the remaining part of the slot. Therefore, Paatelma inherently teaches power evaluation (col 2 lines 34-55), since there is a detection of the power for the header transmission which is different for the power of the data transmission.

Regarding **Claim 26**, Paatelma inherently teaches a method wherein the processor (controller 18 comprises processor, col 4 lines 20-29) evaluates the first transmission power and the second transmission power based on a desired transmission range for the first portion and the second portion of the data packet (col 2 lines 34-40), based on a transmission power level of a transmission received from another mobile communication unit col 4 lines 6-16). Paatelma teaches a cellular communication system (see figures 4-5, col 3 lines 6-17, col 2 line 34-54).

Paatelma teaches a method for operating a wireless terminal in a wireless communication system that operates with frames time divided into slots each having a Header portion followed by a Data portion. The system is arranged to transmit a downlink slot so that the Header portion is transmitted at a higher power level than the Data portion when the Data portion does not contain valid data so as to reduce system interference. This is known as a Quasi-Discontinuous Transmission (Q-DTX) mode of operation. The method includes steps of (A) receiving all of the Header portion and only a part of the Data portion of a slot and detecting whether the Header

Art Unit: 2686

portion was transmitted at a higher power level than the Data portion is being transmitted; and (B) if it is detected that the Header portion was transmitted at a higher power level than the Data portion is being transmitted, terminating the reception of a remaining part of the slot and placing at least a portion of the wireless terminal in a reduced power consumption state. Otherwise, if it is detected that the Header portion was transmitted at the same power level as the Data portion is being transmitted, continuing to receive the remaining part of the slot. Therefore, Paatelma inherently teaches power evaluation (col 2 lines 34-55) , since there is a detection of the power for the header transmission which is different for the power of the data transmission.

In a conventional cellular communication system the mobile units transmits/receives power between each other wirelessly through base stations. The threshold range varies during the operation of the wireless terminal based on an influencing factor that may depend on the velocity of the mobile or amount of noise interference in the channel. One of the causes for the amount of noise and interference in the system, is because the frequency (channels) assignment of the mobile unit interferes with the frequency (channels) assignments of the adjacent mobile unit.

Therefore, the mobile unit receives/transmits power based on power of the other mobile unit.

Regarding **Claim 27**, Paatelma inherently teaches a method wherein the communication unit is coupled to a network (Base station, col 3 lines 60-67) and the processor (controller 18, the processor is part of the controller 18, col 4 lines 20-29) evaluates the first transmission power and the second portion of the data packet (col 2 lines 35-55), the network (cellular network) providing the processor (controller 18, col 4 lines 20-29) information relating to the desired

Art Unit: 2686

transmission range (col 3 lines 6-27). Paatelma teaches a method for operating a wireless terminal in a wireless communication system that operates with frames time divided into slots each having a Header portion followed by a Data portion. The system is arranged to transmit a downlink slot so that the Header portion is transmitted at a higher power level than the Data portion when the Data portion does not contain valid data so as to reduce system interference. This is known as a Quasi-Discontinuous Transmission (Q-DTX) mode of operation. The method includes steps of (A) receiving all of the Header portion and only a part of the Data portion of a slot and detecting whether the Header portion was transmitted at a higher power level than the Data portion is being transmitted; and (B) if it is detected that the Header portion was transmitted at a higher power level than the Data portion is being transmitted, terminating the reception of a remaining part of the slot and placing at least a portion of the wireless terminal in a reduced power consumption state. Otherwise, if it is detected that the Header portion was transmitted at the same power level as the Data portion is being transmitted, continuing to receive the remaining part of the slot. Therefore, Paatelma inherently teaches power detection (col 2 lines 34-55), since there is a detection of the power for the header transmission which is different for the power of the data transmission.

Regarding **Claim 28**, Paatelma teaches a method wherein the power level of the first portion and the second portion is dynamically adjusted during the transmission of the data packet (col 2 lines 35-67, col 3 lines 1-6).

Art Unit: 2686

Regarding **Claim 32**, Paatelma teaches a cellular communication system (col 3 lines 60-67, col 4 lines 1-6) comprising:

means for transmitting a data packet having a first portion (header, col 5 lines 2-18) and a second portion (data portion) (col 2 lines 34-54); and

means for dynamically adjusting the transmission power level of the first portion (header) with respect to the second portion (data) of the data packet coupled to the means for transmitting a data packet having a first portion and a second portion (col 5 lines 2-18).

Regarding **Claim 33**, Paatelma teaches a cellular communication system including means for determining for transmission power levels of the first and the second portions based on a desired transmission range of both the first and the second portion (col 2 lines 32-41).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2686

4. **Claims 9-17, 29-31**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paatelma (US Patent Number 6,463,042 B1) in view of Fischer (US Patent Number 5,768,695).

Regarding **Claim 9**, Paatelma teaches a communicating system wherein the power control module receives the power data packet and dynamically control the transmission power of the first portion and the second portions. Paatelma fails to teach the power control module includes power amplifier. However Fischer teaches a system/unit wherein the power control module includes a transmission power amplifier (col 3 lines 32-39). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to provide a highly desirable system wherein a resource allocation independent from the network architecture and the associated transmission and processing delays.

Regarding **Claim 10**, Paatelma teaches a unit wherein the power control module 18 includes : a D/A converter adapted to receive power data information in digital format and convert the power data information to an analog control signal (col 4 lines 20-29), the analog signal adapted to control, a transmission power module adapted to receive the data packet, control the transmission power (col 4 lines 23-29). However Paatelma fails to teach that the power control module includes a power amplifier. However Fischer

Art Unit: 2686

teaches the power control module includes a power amplifier (col 3 lines 34-39).

Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to provide a system that has a better performance with high signal qualities.

Regarding **Claim 11**, Paatelma teaches a unit including a processor coupled to the D/A converter, processor adapted to transmit the power data information to the D/A converter (col 4 lines 22-29).

Regarding **Claim 12**, Paatelma teaches a unit 10 wherein including a receiver 16 coupled to the controller 18, the controller 18 includes processor, and the processor adapted to transmit the power data information to the D/A converter (col 4 lines 22-26).

Regarding **Claim 13**, Paatelma teaches a unit wherein a receiver 16 coupled to controller 18 the controller 18 includes processor (col 4 lines 22-27), the receiver being adapted to receive a transmission from the other communication unit transmitting information to receiver 14, the processor evaluating a range from the transmission and downloading power data information to the power control circuit based on a desired transmission range of the data packet (col 2 lines 36-54).

Art Unit: 2686

Regarding **Claim 14**, Paatelma teaches a unit wherein the power control module 18 includes a digital processor device, a microprocessor device, and various analog to digital A/D converters, digital to analog D/A converters (col 4 lines 20-26). Paatelma fails to teach a unit wherein the processor coupled to the power data register for storing the power data information. However Fischer teaches a unit wherein the controller (processor) is coupled to a data register section (see figure 3, col 4 lines 27-35).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made, to combine the above teaching of Fischer with Paatelma, in order to provide a highly desirable system wherein a resource allocation is independent from the network architecture and the associated transmission and processing delays.

Regarding **Claim 15**, Paatelma fails to teach a unit wherein a processor is coupled to the power data register section, the processor being adapted to transmit the power data information to the power data register section. However Fischer teaches that the power control module is coupled to a data register section module being adapted to store the power data information (col 4 lines 27-33). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to provide a system that has a better performance with high signal qualities.

Art Unit: 2686

Regarding **Claim 16**, Paatelma teaches a receiver coupled to the processor, the receiver being adapted to receive a transmission from other communication unit (col 4 lines 53-65).

Regarding **Claim 17**, Paatelma inherently teaches a cellular communication unit including transmission power information to the processor (controller 18) from a transmission communication unit 14 transmitting information to the receiver 16 (see figure 4, col 4 lines 22-26), the processor (controller 18) evaluating a range from the transmission power information and downloading power data information to the power control circuit based on a desired transmission range of the data packet (See figure 4, col 2 lines 34-41, col 4 lines 22-34).

Regarding **Claims 29**, Paatelma teaches a communication unit transmitting first portion of data with first transmission level and second portion of data with second transmission level (col 2 lines 35-41),

a processor (see figure 4, controller 18 includes processor, col 4 lines 22-26), to the power adjustment module 18 (the system transmit power, therefore, the controller is power controller module), the processor begins adapted to provide power adjustment information to the power control module 18, and a receiver 16 coupled to the processor 18 (col 4 lines 8-26);

Art Unit: 2686

a receiver receives over RF link wherein the access point system is coupled to the network (col 2 lines 34-36);

a transmitter adapted to transmit data over RF link (col 3 lines 60-67, col 4 lines 1-8), the cellular system is based on Radio Frequency link (RF).

Paatelma fails to teach that an access point system in a communication system utilizing an IEEE 802.11 standard comprising:

a power control module coupled to the transmitter, the power control module adapted to receive a data packet having a PLCP preamble and PLCP header portion and a data portion dynamically adjust the transmission power of the packet during transmission of the packet, such that the PLCP preamble portion beings. However Fischer teaches a unit that transmits and receives a data packet having a PLCP preamble and PLCP header portion and a data portion dynamically adjust the transmission power of the packet during transmission of the packet, such that the PLCP preamble portion beings (see figure 1, col 2 lines 61-67, col 3 lines 1-10). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to provide a flexible interface between a medium access control device and a wireless physical device.

Regarding **Claims 30-31**, Paatelma teaches a D/A converter, the D/A converter adapted to receive power data information in digital format and convert the power data

Art Unit: 2686

information to an analog control signal, the analog signal adapted to control the transmission power (col 4 lines 8-26). Paatelma fails to teach a unit wherein the power control module includes a transmission power amplifier adapted to receive the data packet, control the transmission power of the PLCP preamble portion and the data portion. However Fischer teaches a unit wherein the power control module 102 includes a transmission power amplifier 110 adapted to receive the data packet and control the transmission power of the PLCP preamble portion and the data portion, the transmission power amplifier adapted to receive power data information to control the transmission power of the transmission power amplifier (col 2 lines 60-65, col 3 lines 1-10). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Fischer with Paatelma, in order to prevent the unit from spurious emission of energy that lie outside of the FCC mandated special density envelop. Thereby benefit the unit by passing FCC rule-testing for granting operation license.

5. **Claims 2-5, 20, 34,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Paatelma (US Patent Number 6,463,042 B1) in view of Hassan et al. (US Patent Number 6,301,231 B1).

Art Unit: 2686

Regarding **Claim 2**, Paatelma teaches a cellular communication unit/method (col 3 lines 60-56). Paatelma does not specifically mention that the unit/method transmits, the first portion of the data packet at a first data rate end and the second portion of the data packet at a second data rate. However Hassan teaches a unit/method transmits, the first portion of the data packet at a first data rate end and the second portion of the data packet at a second data rate (col 2 lines 17-27). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hassan with Paatelma, in order to provide a busy tones that indicates a base station is in an overload condition, therefore, improve the performing transmission data rate allocation of a high speed wireless communication network.

Regarding **Claim 3**, Paatelma teaches a method wherein the first power and the second power are adjusted so that the first portion and the second portion are selected so that the first portion and the second portion have a similar transmission ranges (col 2 lines 51-54).

Regarding **Claims 4-5**, Paatelma teaches a cellular communication system (col 3 lines 60-67, col 4 lines 1-7). Paatelma fails to teach that the data packet includes a third portion and the power adjustment module is adapted to receive the data packet, and having the third portion and transmit the third portion at third rate. However Hassan teaches a communication network the data packet includes a third portion and the power

Art Unit: 2686

adjustment module is adapted to receive the data packet, having the third portion and transmit the third portion at third rate (col 2 lines 17-27, lines 56-62). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hassan with Paatelma, in order to provide a busy tones that indicates a base station is in an overload condition, therefore, improve the performing transmission data rate allocation of a high speed wireless communication network.

Regarding **Claims 20, 34**, Paatelma teaches a system wherein the means for dynamically adjusting the transmission power level. the power level of the first portion with respect to the second portion of the data. Paatelma fails to teach further adjusting the power transmission level of a third portion of the data packet with respect to the first and second portions. However Hassan teaches further adjusting the power transmission level of a third portion of the data packet with respect to the first and second portions (col 2 lines 17-27, lines 55-62). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hassan with Paatelma, in order to provide a busy tones that indicates a base station is in an overload condition, therefore, improve the performing transmission data rate allocation of a high speed wireless communication network.

Art Unit: 2686

6. **Claim 6**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Paatelma et al. (US Patent Number 6,301,231 B1) in view of Hassan (US Patent Number 6,301,231 B1) in a further view of Fisher et al. (US Patent Number 5,768, 695).

Regarding **claim 6**, the combination of Paatelma and Hassan fails to teach a system/unit wherein the data packet conforms to the IEEE 802.11 standard protocol and the first portion of the data is PLCP preamble, the second portion of the data packet is a PLCP header and the third portion of the data packet is a data portion. However Fischer teaches system/unit wherein the data packet conforms to the IEEE 802.11 standard protocol and the first portion of the data is PLCP preamble, the second portion of the data packet is a PLCP header and the third portion of the data packet is a data portion (col 2 lines 61-67, col 3 lines 1-10). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to provide the above teaching of Fischer with the combination of Paatelma and Hassan, in order to prevent the unit from spurious emission of energy that lie outside of the FCC mandated special density envelop, thereby, benefit the unit by passing FCC rule-testing for granting operation license.

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2686

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. **Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications indented for entry)

Or:

Art Unit: 2686

(703) 308-6306, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, Va., sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the technology Center 2600 Customer Service Office
whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communication from the
examiner should be directed to Melody Mehrpour whose telephone number is (703)
308-7159. The examiner can normally be reached on Monday through Thursday (first
week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m.
to 5:00 p.m.

If attempt to reach the examiner are unsuccessful the examiners supervisor,
Marsha Harold-Banks be reached (703) 308-5576.

NM

Jan 12, 2004

Marsha D Banks-Harold
MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600